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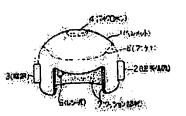
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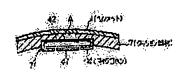
NAGAYAMA HIROSHI

(54) SPEAKING DEVICE

(57) Abstract:

PURPOSE: To obtain a device which can be used even under water and its action is hardly restricted by installing a necessary apparatus in a helmet, etc., and making a microphone (receiver too for an underwater use) be a bone conducting structure, and fixing its vibrating part at the inside wall of the helmet. CONSTITUTION: A transmitter-receiver 2, an power source 3 and an antenna 6 perform a wireles communication with an outsider being fixed in the helmet 1. The microphone 4 and the receiver 5 are of the bone conducting structure, namely such that a vibrating part 41 is brought into contact with the head of a man, and detects the vibration of the head due to a pronunciation, or transmits the vibration of a received sound to the head directly. This device can be used under water because the sound is transmitted by a bone conduction.





Besides, because the microphone is held inside a covering body without a protruding structural part, the man is not restricted for his action. For wearing it, it is enough to put it on the head only, then the wearing is simple and an emergency state can be rapidly dealt with.

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